Thy Ton

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EXPERIENCE

Cloud Engineer Intern   **CrowdStrike Inc.** | Irvine, CA   Jun. 2020 - Present
+ Design and implement a Go-based Kafka redistributor to reduce lag on partitions by reproducing messages to other partitions
+ Set up a Redis hash to store the current redistributor states of Kafka consumer groups, each of which is a hash field
+ Add a REST API endpoint available to all microservices for updating the redistributor state in Redis cache
+ Develop a poll to periodically retrieve the current redistributor state and tune the Kafka redistributor accordingly in all corresponding service instances
+ Write unit and benchmarking tests for the redistributor and API's handler/helper functions using Ginkgo and Gomega
+ Prepare Python-based End-to-end cloud tests and the redistributor in the Kafka consumers in all microservices
    Technologies: Git, Jenkins, Bamboo, Jira, Docker, AWS, Splunk, Grafana

Back-End Software Engineer Intern   **Ardent Labs** | Irvine, CA   Nov. 2019 - Jun. 2020
+ Maintained GraphQL API for internal mobile and web applications; serving 1000+ students
+ Designed and used Jest to implement Data Access Object (DAO) mocks dropping database dependencies which greatly reduced unit testing time
+ Migrated old unit tests to use the DAO mocks for continuous delivery testing
+ Introduced a strategy to move old data which reduced query time and downsized the primary database by 40%
    Technologies: Drone, Jira, RethinkDB

Undergraduate Research Assistant   **University of California, Irvine**   Sep. 2018 - Mar. 2019
+ Worked with Prof. Wayne Hayes and graduate students to improve C++ network alignment algorithm SANA
  https://doi.org/10.1093/bioinformatics/btx090
+ Implemented SANA's operation modes in object oriented design for scalability
+ Measured and analyzed SANA's performance on different benchmarks for tracking progress

Student Assistant   **University of California, Irvine**   May. 2018 - Dec. 2018
+ Built an internal course recommender application operated on a Apache server using PHP, mySQL, HTML, jQuery supporting 1500+ students and counselors at School of Physical Sciences

EDUCATION

University of California, Irvine   **B.S. in Computer Science, GPA: 3.78**   Dec. 2020
Courses: Data Structures, Databases, Web & Mobile Applications, Operating Systems, Networks, Machine Learning

PROFICIENCIES

Go, C++, C, Java, Python, Typescript, Javascript, HTML/CSS; GraphQL, mySQL, ReQL
Ginkgo, Gomega, React, Jest, JQuery; Git, Jira

PROJECTS

+ **Propositional Logic Interpreter** (Python) A program that parses logical sentences and operations to an expression tree, and performs inferences
+ **Solar System Simulator** (Java) An application that models the planets' movements in Solar system accounting for their mutual gravitational forces
+ **Partially Observable Logical Agent** (Python) An agent that prioritizes tasks and collects rewards in a partially-observable environment optimally using A* algorithm

AWARDS

2nd at Orange Coast College Programming Contest   2018
3rd among community colleges at SoCal ACM ICPC   2017